

Listing of Claims

1. (Currently amended) A method of obtaining flavonoids comprising:
obtaining a plant that overexpresses ANT1 compared to wild-type plants[[,]]; and
extracting a flavonoid from the plant.
2. (Original) The method of claim 1 wherein the plant is a transgenic plant that contains a transformation vector that causes the overexpression of ANT1.
3. (Original) The method of claim 1 wherein the plant has been selectively bred to have an allele of or mutation in an endogenous ANT1 gene that causes the overexpression of ANT1 compared to plants lacking the allele or mutation.
4. (Currently amended) The method of any of claims 1-3 ~~or 2~~ wherein the plant is selected from the group consisting of tomato plants and tobacco plants.
5. (Original) The method of claim 4 wherein the plant is tomato and the flavonoid extracted is an anthocyanin selected from the group consisting of delphinidin 3-rutinoside-5-glucoside, delphinidin 3-(coumaroyl)rutinoside-5-glucoside, delphinidin 3-(caffeoyl)rutinoside-5-glucoside, petunidin 3-rutinoside-5-glucoside, petunidin 3-(coumaroyl)rutinoside-5-glucoside, petunidin 3-(caffeoyl)rutinoside-5-glucoside, malvidin3-rutinoside-5-glucoside, malvidin 3-(coumaroyl)rutinoside-5-glucoside, and malvidin 3-(caffeoyl)rutinoside-5-glucoside.
6. (Original) The method of claim 4 wherein the plant is tobacco and the flavonoid extracted is an anthocyanin selected from the group consisting of cyanidin-3-glucoside and cyanidin-3-rutinoside.
7. (Original) The method of claim 4, wherein the plant is tomato, and wherein the flavonoid extracted is an isoflavone.
8. (Original) The method of claim 7, wherein the isoflavone is glycitein.

9. (Original) A flavonoid-containing plant extract obtained by the method of any one of claims 1-8.